



THE

MEADOWLARK

A newsletter for those involved with Wisconsin's Glacial Habitat Restoration Area



Volume 4, Issue 1

Spring/Summer 2003

BIOINVASION- WEST NILE VIRUS

By Eric Allness

DNR Wildlife Technician-Oshkosh

Biological threats to humans and wildlife continue to occur at an accelerating rate as more foreign plants, animals, and diseases are introduced accidentally into new environments. One of the latest diseases to be become established in North America is the West Nile Virus (WNV).

A mosquito-borne disease, WNV results in an inflammation of the brain, referred to as encephalitis. The virus was detected for the first time in the Western Hemisphere in the New York City area in 1999. Originally identified in 1937 in Africa, the virus is also present in Europe and the Middle East.

West Nile Virus is transmitted by the bite of an infected mosquito. Few mosquito species carry the virus, with *Culex pipiens* or "house mosquito" being the principle carrier of the disease. The virus primarily cycles between birds and mosquitoes, but it can also infect humans and domestic animals, such as horses. There is no evidence indicating the virus can be spread by person-to-person contact or by handling infected animals.

Since the initial outbreak in New York, the virus has been spreading rapidly across the United States. In the summer and fall of 2002, WNV was identified in 569 birds in 65 counties throughout Wisconsin. Additionally in 2002, 52 Wisconsin residents contracted the illness, including 3 deaths. Nationwide 4,156 cases were reported, including 284 deaths.



People contracting mild infections of the illness, referred to as West Nile Fever, may experience headache, fever, skin rash and swollen lymph glands. People contracting more severe infections, referred to as West Nile Encephalitis, may experience high fever, neck stiffness, stupor, disorientation, coma, tremors, occasional convulsions and paralysis. Only about two persons in every 10 who are bitten by an infected mosquito will experience any illness.

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Compass Plant *Silphium laciniatum*



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Featured Property

Schumacher GHRA

Previous Landowners:

Rodney and Evelyn Schumacher,
Esther E. Dykstra, and
Glen and Donna Smits

Location: Courtland Township,
Columbia County

Size: 397 Acres



The largest portion of the Schumacher Property, 235.5 acres, was purchased by the DNR's GHRA program for wildlife conservation in 2000. This arrow-shaped wedge of land had been mostly drained for agriculture production using an extensive system of drainage ditches. Through the use of ditch plugs and scrapes, DNR staff have restored beautiful and complex mosaic wetlands that cover much of the landscape. Surrounding wet grassland areas and three separate wooded lots add additional habitat types to the property.

In 2002, two tracts of land adjacent to the north end of the property were purchased. The Smits Acquisition brought with it 93 acres of gently rolling woods, marshland, and upland grassland. The Dykstra Acquisition consists of a short, fairly steep 10-acre slope that separates 12 acres of upland grass cover on the northern portion of the land from 41 acres of lowland marsh area. It has been planted with native grassland species such as Big Bluestem, Canada Wild Rye, and Switchgrass. This combined with native wildflowers such as Leadplant, Yellow Cone Flower, and New England Aster creates critical upland nesting cover for the GHRA's three keystone groups; waterfowl, pheasants and grassland songbirds.

An extremely large number and variety of wildlife utilize this wonderfully diverse property. Sightings include many different types of waterfowl, tundra swans, turkeys, deer, pheasants, red-tailed hawks, and even Hungarian Partridges. The habitat is also suitable for additional wetland species such as mink, frogs, and even the state threatened Blanding's Turtle.

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GHRA Online: <http://www.dnr.state.wi.us/org/land/wildlife>

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Articles, news items, photos, and ideas are welcome.

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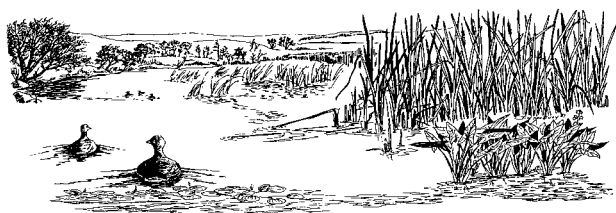
SURVEILLANCE EFFORTS

The DNR and Wisconsin Division of Public Health continue to collect samples of sick/dead birds in 2003 for WNV.

West Nile Virus can infect a wide range of bird species with corvid species (crows, ravens, and blue jays) being the most susceptible. Once a bird becomes infected with WNV, death can occur within five to seven days. Birds succumbing to WNV are most often found singly rather than in a mass die-off.

If you find a dead bird, collect it wearing rubber gloves, place in a plastic freezer bag, and freeze immediately. Birds found dead must be in good postmortem condition. Indicators of suitable postmortem condition include no scavenging of the carcass, an intact body cavity, no maggot infestation, and no strong odor to the carcass.

To report a dead/sick bird, contact the WNV Hotline at 1-800-433-1610. Up to date information on reported cases of WNV by county is available on the Wisconsin Department of Health & Family Services website (www.dhfs.state.wi.us/dph_bcd/westnilevirus/).



MOSQUITOES & WETLANDS

Wetlands often unfairly receive the blame for being mosquito breeding grounds. In actuality, healthy wetlands are home to abundant populations of fish, insects, amphibians, birds, and bats, all of which prey on mosquito larvae and/or adults. The little brown bat, which is a common native bat of Wisconsin, is capable of consuming over 600 mosquitoes in an hour. Dragonflies, damselflies, and water striders also are natural enemies of mosquitoes. But these insects need proper habitat – healthy wetlands – to survive. Standing water areas such as old tires and rut holes do not provide habitat for mosquito predators and are thus major production areas. A single discarded tire can produce over 500 adult mosquitoes.

Reducing or eliminating standing water around your home will reduce the habitat available for mosquitoes to reproduce. The following actions can be taken to help reduce mosquito populations:

- Remove discarded tires that could hold water
- Dispose of tin cans, plastic containers, ceramic posts or similar water-holding containers left outside
- Ensure roof rain gutters drain properly – clean gutters in the spring and fall and when they are clogged
- Clean and chlorinate swimming pools and hot tubs – when not in use, keep covered and/or emptied
- Drain water from pool covers
- Change the water in bird baths every 3-4 days

The presence of WNV in Wisconsin makes it more important now than ever to protect and restore wetlands. Healthy wetlands can control mosquito numbers in addition to providing wildlife habitat, preventing flooding and purifying water. ❖

GHRA Plant Profile

By Brenda Hill
WDNR Biologist-Horicon

Big Bluestem
Andropogon gerardi



A native, warm season grass perennial to Wisconsin, Big Bluestem, is commonly named for the areas of its stem that tend to be bluish in color. You may have also heard it referred to by its alias, turkey foot, based on the arrangement of the flower branches.

This species is a dominant of the tall grass prairies, some records even refer to it as the “king.” It can reach a height of up to 9 feet tall, but that’s just above ground, underground it maintains a root system that reaches down over 8 feet

These amazing roots allow the plant to withstand the droughts, temperatures, and wildfire conditions that are common in the prairie.

Big Bluestem grows in clumps. Flowers are at the top of the stalks; however, to identify before the flowers are present, look for the fine hairs dispersed on the upper leaf surface. The base of the plant tends to be hairy and have a purplish color.

Big bluestem once thrived in Wisconsin’s prairie landscape that accounted for over 2 million acres, although now, most of the original stands have disappeared. However, through the restoration efforts of the Glacial Habitat Restoration Area program, and other federal and non-profit organizations, we are bringing the King back to its native lands. ❖

Stewardship Fund Preserved With Veto Announcement

By Tim Lizotte
DNR Wildlife Biologist-Oshkosh

On July 14th Governor Jim Doyle announced that he would veto cuts to the Knowles-Nelson Stewardship Fund in the upcoming Budget. Stewardship funds are used to purchase public lands and easements for many purposes including trails, wildlife and fisheries conservation, outdoor recreation, natural areas, parks, and forests. The legislative Joint Finance Committee had proposed to reduce the State land acquisition fund from 60 million/year to 15 million for 2004 and 10 million for 2005. In addition to the proposed cuts, Joint Finance ordered the sale of 40 million dollars of state land, with the proceeds going to the State's budget stabilization fund. State holdings targeted for sale by Joint Finance included isolated parcels that could have been interpreted as those purchased in the Glacial Habitat Restoration Area (GHRA).



The Wisconsin Stewardship Fund has its roots in the 1961 Outdoor Recreational Act Program (ORAP) enacted by then Governor Gaylord Nelson. ORAP provided funds for public recreation and conservation land purchases. In 1989, building on this important start, Representative Spencer Black (D-Madison) authored the Gaylord Nelson-Warren Knowles Stewardship Fund that was signed into law by Governor Tommy Thompson. The Fund provided dollars for land acquisition at a rate of 23 million/year for 10 years from 1990-2000. The fund was re-authorized at 46 million/year from 2000-2010, and then recently raised to 60 million/year to keep pace with rising land values. The money is available for state land acquisition and also as matching funds for private organizations and municipalities. For example, if The Nature Conservancy

wanted to purchase a property for conservation valued at \$500,000 and was able to provide 50% matching funds (\$250,000), the Stewardship Fund would provide the additional \$250,000 for the purchase. These grants are available on a competitive basis to all qualified organizations and municipalities. To date, Stewardship Funds have preserved over 300,000 acres of land in 71 of 72 Wisconsin counties and generated 100 million dollars of matching funds towards land conservation in the State.

To date, Stewardship Funds have preserved over 300,000 acres of land in 71 of 72 Wisconsin counties and generated 100 million dollars of matching funds towards land conservation in the State.

Funding for the Stewardship program is generated through State bonding and provides 60 million/year for land purchasing while paying out 5 million/year in bond interest payments. These interest payments amount to less than 1/2 of 1% of the current annual state budget, so the budget deficit impact is minimal.

Since 1992, the state makes an annual aid payment equivalent to property taxes to all taxing jurisdictions including towns, villages, cities, schools, counties, and special districts on all lands under state ownership. Therefore, communities enjoy recreational and conservation benefits from state lands while receiving all applicable tax revenue, yet only providing minimal services to these parcels.



Notable properties purchased with Stewardship funds include the Willow Flowage in Oneida County, the Turtle-Flambeau Flowage in Iron County, the Ice Age Trail, the Gov. Thompson State Park and the Peshtigo River State Forest in Marinette County, and of course, Glacial Habitat Restoration Area lands. Adequate funding of the Stewardship Program ensures that Wisconsin can continue to preserve lands from coastal Lake Superior and Michigan, to the "North Woods" to the smallest natural area while providing public access to these special places in perpetuity.❖

New Faces in the GHRA

LAURA HARTNER-*Wildlife Technician LTE-Horicon*

I began my career earning Bachelor's degrees in Zoology and Biological Aspects of Conservation from the University of Wisconsin-Madison in May of 1999. Upon graduation, I was hired to teach environmental education at Retzer Nature Center. I spent much of my time there developing and leading programs for school groups and the public. I also helped clean and collect prairie seed, grow plants for their annual native plant sale, and perform prescribed burns throughout the Waukesha County Park System. Since I joined the GHRA project in the fall of 2002, I have kept busy helping with thistle control, prescribed mowing of fields, brush removal, cutting firebreaks and generating GIS maps of the properties to post at their parking lots. I have also been active with the Chronic Wasting Disease Eradication program, both in sample collecting and updating the enormous Eradication Zone landowner database.



JOSH JACKL-*Wildlife Technician LTE-Horicon*

I am a May 2002 graduate of UW-Stevens Point, where I received my bachelor's degree in Biology with a minor in Conservation Biology after four years. I grew up in Northern Wisconsin on a small family farm near the town of Phelps where lakes, trout streams, and hunting opportunities are endless. While in school, I was involved in soccer, baseball, and basketball, with soccer being my passion. This is my third consecutive job with the DNR after getting my start at Sandhill Wildlife Area near Wisconsin Rapids. At Sandhill I was involved with wolf studies, Karner Blue butterfly surveys, goose and duck banding, and Trumpeter Swan monitoring, among many other things. From there I moved to Dodgeville in September to help in the winter campaign against CWD. Being an assistant station captain at Barneveld was quite an experience for me (although not always a pleasant one), and I got to meet and work with many of the great wildlife management staff from around the state. After wrapping up the winter campaign at the end of March, I was anxious to get back to my wildlife management roots so I accepted the Wildlife Technician job here in Horicon with the GHRA and have been more than happy with it since. Glad to be aboard!



ANGIE RUSCH-*Wetland Restoration Coordinator-Horicon*

I would like to introduce myself as the Wetland Restoration Coordinator for the GHRA program- Angie (Schraufnagel) Rusch. I grew up on a small dairy farm just a couple miles east of the Horicon Marsh, in Leroy. I graduated in May of 1996 with a B.S. degree in Resource Management from UW- Stevens Point. Over the course of the years, I have worked for DATCP in the Gypsy Moth Program, Kettle Moraine Springs Fish Hatchery, and the U.S. Fish & Wildlife Service at the Horicon NWR. I have spent the past four years as a Wildlife Technician at the Oshkosh and Pike Lake State Park offices, working on public lands as well as on private lands doing grassland restorations. In my free time I am busy as the secretary of the Brownsville Sportsman's Club, working at a farmers' market during the summer months, working at the Horicon NWR Visitor Center in the spring and fall, taking care of our chocolate lab and terrier, and hunting birds in fall.



JOHN SIPPL-*Wildlife Technician LTE-Horicon*

Hi, my name is John Sippl. I am a 2002 graduate of UW-Stevens Point with a major in Wildlife Ecology and Biology. Upon graduation I moved to the LaCrosse region for a year. In LaCrosse I worked for the wildlife management and endangered resources programs controlling exotic species, enhancing and maintaining local wildlife and state natural areas, and restoring remnant goat prairies. In the spring of 2003 I joined the GHRA. I grew up in a farm community around Antigo, WI where I learned to respect and admire the northwoods. In my free time I enjoy the outdoors, participating in many sports, hunting and fishing. I hope to see you out on one of our wonderful grasslands and wetlands enjoying yourself.



ERIC ALLNESS-*Wildlife Technician-Oshkosh*

Eric grew up in Dodgeville WI, and earned Bachelor of Science degrees in Wildlife Management and Biology from UW-Stevens Point in 1996. While attending Stevens Point Eric completed summer internships with the DNR and the U.S. Fish and Wildlife Service. Following graduation he was employed as Wildlife Management Limited Term Employee in Fitchberg and then New Richmond. For the past three years, Eric was employed by USDA-Natural Resources Conservation Service as a Wetland Reserve Program Biologist in Fond du Lac, WI. During that time, Eric restored over 1,600 acres of wetland habitat in the GHRA under the Wetland Reserve Program. Eric's passions outside of work include hunting, fishing, and playing the guitar.



All those Bugs!!

By Eric Lobner
DNR Wildlife Biologist-Horicon



Looking for a natural, environmentally safe and effective way of controlling mosquitoes and other undesirable biting insects? Sick of always having to run to the store and buy insect repellent every time you go outside? A little concerned with using all those chemicals on your skin? Consider attracting some bats to your property! Research has shown that a single bat will consume well **over 1,000 insects a night** and a big brown bat can consume between **3,000 and 7,000 mosquitoes every night!!** Contrary to popular belief, bats are not vicious, filthy, or likely to attack people or transmit diseases.

One of the best ways of attracting a bat to your property is by constructing a bat house. Bat houses are a simple and great project to involve the entire family and are low in cost with a high return in the number of insects consumed. The instructions listed are from "The Bat House Builder's Handbook" by Bat Conservation International, Inc. and are the most recommended design to attract a family of bats.

When installing your bat house, be sure to place it 12' to 15' above the ground on the side of your home or a tree in the area. Boxes that are near water, including lakes, marshes, bogs and streams and protected from prevailing winds, are the most attractive. Since bats are temperature sensitive, you may want to consider painting your box black, putting a black roof on the house, or selecting a sunny exposure to keep the temperature in the box between 80 and 100 degrees.

For more information on bats, check out the Bat Conservation International website at www.batcon.org

Materials Needed (makes 1)

1/4 sheet (2' x 4') 1/2" AC, BC, T1-11 or CDX (outdoor grade) plywood. *DO NOT use pressure treated wood.*

One piece 1" x 2" (3/4" x 1 1/2" finished) x 8' pine (furring strip)

20-30 1 1/4" coated deck or exterior-grade Phillips screws

One pint dark, water-based stain, exterior-grade

One pint water-based primer, exterior-grade

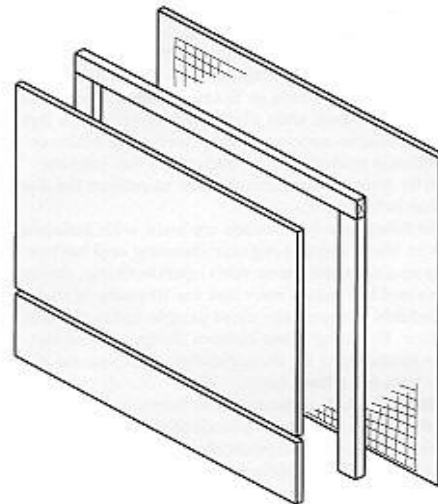
One quart flat water-based paint or stain, exterior-grade

One tube paintable latex caulk

1" x 3" x 28" board for roof (optional, but highly recommended)

Black asphalt shingles or galvanized metal (optional)

6-10 7/8" roofing nails (optional)



Construction Procedure

1. Measure and cut plywood into three pieces:

26 1/2" x 24"

16 1/2" x 24"

5" x 24"

2. Roughen inside of backboard and landing area by cutting horizontal grooves with sharp object or saw. Space grooves about 1/2" apart, cutting 1/16" to 1/32" deep.

3. Apply two coats of dark, water-based stain to interior surfaces. Do not use paint, as it will fill grooves, making them unusable.

4. Measure and cut furring into one 24" and two 20 1/4" pieces.

5. Attach furring strips to back, caulking first. Start with 24" piece at top. Roosting chamber will be 3/4" wide (front to back).

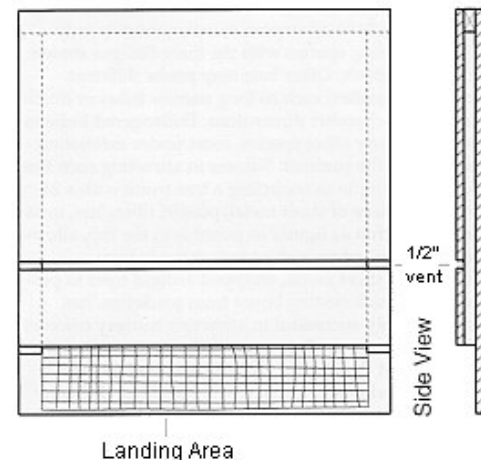
6. Attach front to furring strips, top piece first (don't forget to caulk). Leave 1/2" vent space between top and bottom front pieces.

7. Caulk around all outside joints to further seal roosting chamber.

8. Attach a 1" x 3" x 28" board to the top as a roof, if desired (optional, but highly recommended).

9. Paint or stain exterior three times (use primer for first coat).

10. Cover roof with shingles or galvanized metal (optional).



SHOREBIRD of the PRAIRIE

Bartramia longicauda

By Mark Randall
WDNR Biologist-Oshkosh

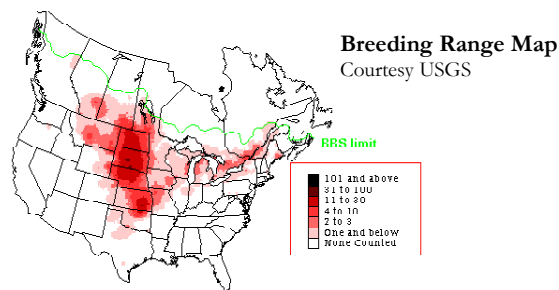
Around late April, I was driving along a north-central Fond du Lac County rural road when I observed a large, approximately 12 inch tall, light brown shorebird with a 26-inch wing span, a thin, long neck, disproportionately small head, large dark eye, relatively short bill and long tail. Its back and wings were dark brown with a streaked breast. The unknown bird flew from one wooden fence post to another having the odd habit of holding its wings high above its back for a few moments after landing. There were no wetlands nearby, just large expanses of alfalfa-brome hayfields and undisturbed tall grass prairie. I was relatively sure what the bird was until it made one of its unmistakable calls. A bubbling pip-pip-pip-pip along with the beautiful whr-r-reep, whreecow [like a wolf whistle]. Obviously, calling to its mate and not myself. This call is most heard from mid-April through June. I knew for sure what it was. How about you?



In 1853, P. R. Hoy, considered this species population as “abundant” in Wisconsin. Around the mid 1880’s, they attracted the attention of market hunters looking for a bird to fill the void created by the decline and ultimate extinction of the passenger pigeon. The combination of market hunting and loss of prairie habitat, between 1895 and 1920, they nearly

disappeared. Today, only a somewhat common resident in eastern Wisconsin.

They arrive in Wisconsin mid-April. They have a territory size of 20 to 30 acres. Only one successful nest is made each season with 4 eggs per clutch. The nest is well hidden in a slight depression with thick clump of grass arched over the top. Grass is twisted in a circle to form a neat 4-5 inch diameter cup. Incubation by both sexes takes 21 days. The precocial chicks are long-legged like their parents and can follow them around within two days after hatching. The young are fledged by the time they are a month old. They are primarily insectivorous, feeding primarily on grasshoppers, crickets, butterflies, beetles, spiders, ants and weevils; weed seeds are occasionally eaten. They begin their fall migration, about mid-August, back to the pampas of Argentina, Uruguay and southern most Brazil. An extraordinary 5,000 mile migration! Give up yet?

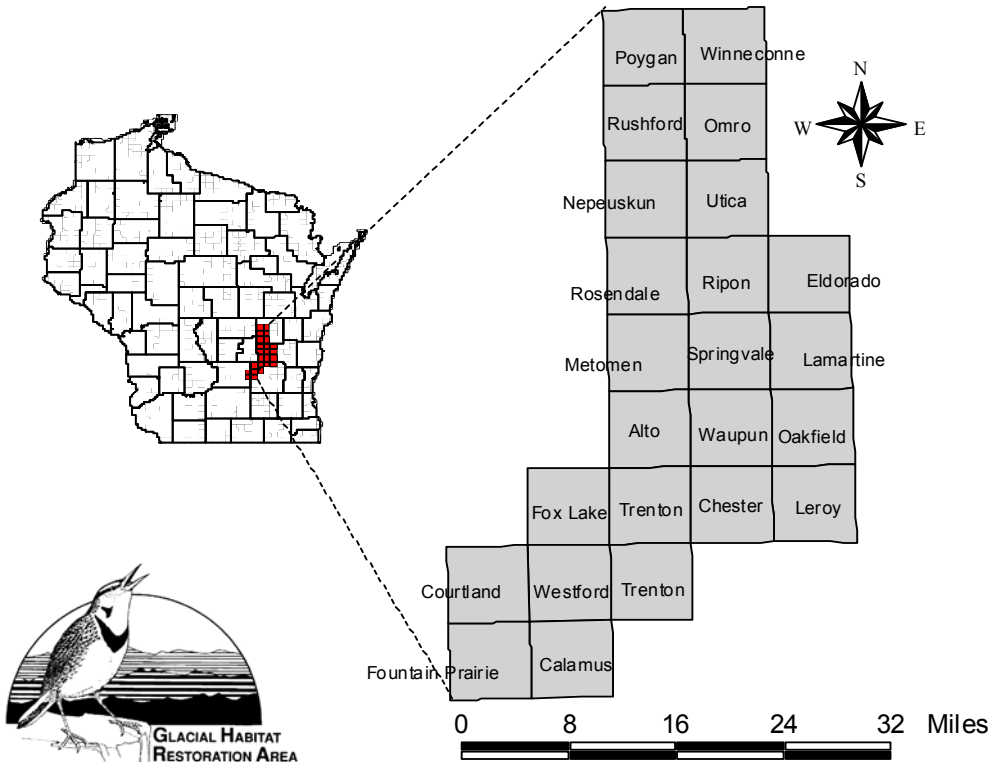


Of the 47 species of shorebirds known to nest in North America, only the killdeer, mountain plover, long-billed curlew, and upland sandpiper nest and feed in upland prairie habitat. From the earlier description, you now know it is the upland sandpiper (*Bartramia longicauda*). The upland sandpiper prefers short to medium height, (2 to 15 inches), idle grasslands, fallow fields, hayfields, prairies, open meadows, and pastures. Short grass-forb vegetation is especially important for brood-rearing and foraging. They prefer large, open fields at least 40 acres to greater than 100 acres in size.

This is the first time I have observed the upland sandpiper in Fond du Lac County. Previously, I have observed them in the Buena Vista Marsh in Portage County. The bird is a species of management concern in Wisconsin due to its population decline as a result of fragmentation of habitat, old field succession, intensive row crop agriculture and rural residential development. Management practices beneficial for upland sandpiper include delayed hay mowing until after July 31st, no-till farming, use of a deferred rotational grazing system, planting and maintaining native/non-native grassland, preserving existing grassland habitat, and keeping dogs and cats on leashes during the nesting season.

So, next April, if you have undisturbed upland grassland habitat on your property, keep an ear out for the wolf whistle call of the upland sandpiper. ❖

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